



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 15 2002

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Carolyn W. Merritt
Chief Executive Officer
U.S. Chemical Safety and Hazard Investigation Board
2175 K Street N.W., 4th Floor
Washington, DC 20037-1809

Re: CSB Recommendation 2001-01-H1-R3 and R4

Dear Ms. Merritt:

This is an initial reply to your letter of September 25, 2002 to Administrator Whitman in which you transmitted recommendations from the Executive Summary of the Reactive Hazards Investigation. Your report recommends two modifications to the Risk Management Program (RMP) under section 112(r) of the Clean Air Act (CAA). It is our understanding these recommendations call for expanding the coverage of the RMP to include "catastrophic reactive hazards that have the potential to seriously impact the public," and adding reactive chemical incidents to the RMP 5-year accident history.

EPA has several ongoing programs involving the safe management of reactive materials. Some of these efforts are as a result of recommendations arising from the Morton Investigation by the Chemical Safety Board (CSB recommendations 98-006-I-NJ-R08 and R09) and our own investigations.

First of all, the general duty clause of section 112(r)(1) of the CAA covers any stationary source (generally a facility) producing, processing, handling or storing "an extremely hazardous substance," regardless of whether the facility is covered by the RMP rule. "Extremely hazardous substance" is not defined by the CAA. However, based on our analysis of the statute and its legislative history, EPA believes that a substance that poses "catastrophic reactive hazards" with "the potential to seriously impact the public" is presumably an extremely hazardous substance. Accordingly, any facility having such a substance is already required by the general duty clause to identify the hazards which may result from accidental releases, design and maintain a safe facility, and minimize the consequences of accidental releases which do occur. EPA has enforced violations of these provisions on several occasions.

We understand that the Chemical Safety Board provided similar recommendations regarding reactive materials to the Occupational Safety and Health Administration (OSHA).

EPA and OSHA are currently developing a guidance document that describes a process safety management system which can be used by facilities for the safe management of reactive materials that pose catastrophic hazards. EPA is also working with the Center for Chemical Process Safety (CCPS), of the American Institute of Chemical Engineers, on additional guidance on the safe handling of reactive materials. CCPS has completed a safety alert entitled *Reactive Material Hazards*, which describes what facilities should do in order to fully understand the reactive properties of chemicals. In addition, CCPS will soon publish *Essential Practices for Managing Chemical Reactivity Hazards*, which provides guidance on management systems and hazard assessment protocols for reactive materials.

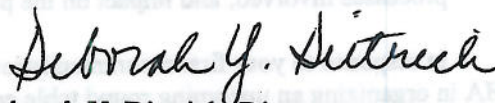
EPA has published Chemical Safety Alerts, which provide suggestions to facilities on specific items of concern to the industry involving process safety management. Several such Alerts have involved reactive hazards, and EPA will continue to publish such documents.

Finally, EPA continues to work with the National Oceanic and Atmospheric Administration (NOAA) on computer based tools to assist facilities with managing their reactive chemicals. This partnership has produced the Chemical Reactivity Worksheet, a free computer program that can be used by facilities to better understand the reactive nature of chemicals and mixtures. We will continue to look for additional tools to assist facilities with managing reactive materials.

EPA is aware that the CSB's full report has been published. We will note the findings within the full report, as well as our ongoing efforts, as we consider our final response to your recommendations. We understand that your procedures recommend a reply to your recommendations within 2 months of receipt. As you know, CAA section 112(r)(6) provides EPA with 180 days to respond.

We look forward to continuing to work with CSB and OSHA on this important matter. Please call me, or Craig Matthiessen, at 202-564-8600 if you have any questions or would like to further discuss this matter.

Sincerely,



Deborah Y. Dietrich, Director
Chemical Emergency Preparedness
and Prevention Office

cc. Marianne L. Horinko
Craig Matthiessen
Mike Marshall, OSHA
Frank Frodyma, OSHA
Richard Fairfax, OSHA



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Re: CSB Recommendations 2001-01-H1-R3 and R4

Dear Ms. Merritt:

This is in reply to your letter of September 25, 2002 to Administrator Whitman in which you transmitted recommendations from the Executive Summary of the Reactive Hazards Investigation Report. Your report recommends two modifications to the Risk Management Program (RMP) under section 112(r) of the Clean Air Act (CAA):

- "1. Revise the Chemical Accident Prevention Programs, 40 CFR 68 (RMP), to explicitly cover catastrophic reactive hazards that have the potential to seriously impact the public, including those resulting from self-reactive chemicals and combinations of chemicals and process-specific conditions. Take into account the recommendations of this report to OSHA on reactive hazard coverage. Seek congressional authority if necessary to amend the regulation.
2. Modify the accident reporting requirements in RMP*INFO to define and record reactive incidents. Consider adding the term "reactive incident" to the four existing "release events" in EPA's current 5-year accident reporting requirements (Gas Release, Liquid Spill/Evaporation, Fire, and Explosion). Structure this information collection to allow EPA and its stakeholders to identify and focus resources on industry sectors that experienced the incidents; chemicals and processes involved; and impact on the public, the workforce, and the environment."

In response to your first recommendation (2001-01-H1-R3), EPA has joined with the CSB and OSHA in organizing an upcoming round table conference involving government, industry, trade associations, professional associations, and labor, to solicit input on how reactive hazards might be addressed in OSHA Process Safety Management and EPA RMP regulations. In our meeting with you, Administrator Whitman, Assistant Administrator Marianne Horinko, and members of the Board last December, we discussed this approach as a way to better define the problem and universe before undertaking a regulatory approach. Any regulatory approach, if taken, would be coordinated with OSHA.

In addition, we have been collaborating with the Center for Chemical Process Safety (CCPS), of the American Institute of Chemical Engineers on guidance on the safe handling of reactive materials. CCPS recently completed a safety alert entitled *Reactive Material Hazards*, which describes what facilities should do in order to fully understand the reactive properties of chemicals. CCPS also has published *Essential Practices for Managing Chemical Reactivity Hazards*, which provides guidance on

management systems and hazard assessment protocols for reactive materials. EPA staff participated in both of these efforts and is looking at ways to make the guideline widely available to all RMP covered facilities.

Besides consideration of how reactive chemicals might be covered by RMP requirements, EPA has also issued Chemical Safety Alerts which provide suggestions to facilities on specific items of concern to the industry involving process safety management. Many past Alerts have involved reactive hazards, and we are considering additional alerts on specific reactive chemical process hazards. Some of these efforts are as a result of recommendations arising from the Morton Investigation by the Chemical Safety Board (CSB recommendations 98-006-I-NJ-R08 and R09) and our own investigations.

EPA continues to work with the National Oceanic and Atmospheric Administration (NOAA) on computer based tools to assist facilities with managing their reactive chemicals. This partnership has produced the Chemical Reactivity Worksheet, a free computer program that can be used by facilities to better understand the reactive nature of chemicals and mixtures. We will continue to look for additional tools to assist facilities with managing reactive materials.

In response to the second recommendation (2001-01-H1-R4), EPA has accepted this recommendation and is working to modify RMP*Submit and RMP*INFO software to add and define "reactive incident" to accident history reporting in RMPs. We also anticipate that this change will be addressed in a RMP modifications proposed rule to be published soon.

We look forward to continuing to work with CSB and OSHA on this important matter. Please call me, or Craig Matthiessen, at 202-564-8600 if you have any questions or would like to further discuss this matter.

Sincerely,



Deborah Y. Dietrich, Director
Chemical Emergency Preparedness
and Prevention Office

cc. Marianne L. Horinko
Craig Matthiessen
David Chung
Breda Reilly
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Richard Fairfax, OSHA